

and glatiramer acetate) vs. conventional therapy for treatment of MS. **METHODS:** Search of electronic databases has identified 8 models. We evaluated the following sources of uncertainty: 1) variation in population characteristics (age, gender, country); 2) sources of data on effectiveness, costs, and health preferences; 3) modeling assumptions (choice and duration of treatment, long-term treatment effectiveness, time of treatment initiation and termination); and 4) model structure (number of health states, study horizon, and modeling software). **RESULTS:** Results for interferon beta-1a varied from cost-saving to \$2,558,660 (2005 US\$) per quality adjusted of life year (QALY), CE of interferon beta-1b varied from \$10,629/QALY to dominated (more costly and less effective), and results for glatiramer acetate varied from \$165,201/QALY to dominated. Time horizon and treatment duration varied from 2 years to lifetime. Studies with longer treatment duration reported worse (higher) CE. All studies used country-specific cost data and performed some sensitivity analyses, but only 4 models were evaluated for uncertainty. **CONCLUSIONS:** Two out of 8 models found interferons cost-effective, while glatiramer acetate was not CE based on societal standards. The differences in models' results were attributed to the lack of evidence on long-term treatment effectiveness and variation in modeling approaches. Use of DMAs could be justified for selected subpopulations, if prices were reduced, or if more information on long-term treatment effect becomes available.

PNL12

COST-EFFECTIVENESS OF ELETRIPTAN VERSUS SUMATRIPTAN: RESULTS FROM A RANDOMIZED, CONTROLLED TRIAL

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OBJECTIVE: Migraine is a chronic, episodic condition that places a tremendous burden on the health care system, employers, patients and families. This study compared the cost-effectiveness of treating a migraine with one dose of eletriptan 40mg or sumatriptan 100mg during a 24-hour period. **METHODS:** This study used data from a randomized, placebo-controlled trial to compare the cost-effectiveness of eletriptan 40 mg and sumatriptan 100mg in treating acute migraine. Three effectiveness measures were compared (sustained headache response at 1 and 2 hours, and sustained pain-free response at 2 hours) over a 24-hour period in defining treatment success. The total cost of treating all evaluable patients was defined as the total cost of the triptans used by patients up to 24 hours after the first dose. The cost per successfully treated patient (CPSTP) was calculated for each of the three definitions of treatment success using the following formula: [CPSTP = Total triptan cost of treating evaluable patients/ Number of successfully treated patients] **RESULTS:** For the 1-hour sustained headache response, the CPSTP estimates were \$103 (95% CI: \$89–122) for eletriptan and \$149 (95% CI: \$126–177) for sumatriptan. For the 2-hour sustained headache response, the estimates were \$48 (95% CI: \$44–53) and \$67 (95% CI: \$60–76) for eletriptan and sumatriptan, respectively. For the 2-hour sustained pain-free response, the estimates were \$90 (95% CI: \$79–105) for eletriptan and \$151 (95% CI: \$127–181), for sumatriptan. The benefit of eletriptan 40mg over sumatriptan 100mg is clear for all three measures of success. **CONCLUSIONS:** The CPSTP, calculated for each effectiveness measure, was consistently lower for eletriptan 40mg versus sumatriptan 100mg. These results support

the use of eletriptan 40mg over sumatriptan 100mg in acute migraine management, and can be used to assist decision makers in formulary considerations.

PNL13

WINNERS AND LOSERS: PATTERNS IN ECONOMIC EVALUATIONS OF ANTI-EPILEPTIC DRUGS

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OBJECTIVES: Examine patterns of published economic “value messages” for anti-epileptic drugs (AEDs). **METHODS:** Using literature review best practices, identified, reviewed, and abstracted data from comparative economic analyses published in English and referenced in PubMed or presented at ISPOR. For each study, documented comparators, “winners” and “losers”, explanation of economic advantage (if any) study sponsor (if any), year published, country of interest, and study design. **RESULTS:** We identified 26 studies containing at least one comparative economic “value message” for an AED. A total of 57% (15) were published as manuscripts; 53% (14 of 26) were sponsored by a drug manufacturer (4 manuscripts and 10 conference abstracts); and 38% (10 of 26) were US-oriented. Of the 14 sponsored studies, Ortho-McNeil (topiramate) sponsored 6 (only 1 published; only 1 US-oriented); UCB (levetiracetam) 4; Novartis (carbamazepine, oxcarbazepine) 3; and GSK (lamotrigine) 1. With only one exception (Ortho-McNeil), sponsored studies generated positive messages for sponsors' products. The 26 studies generated 39 comparative messages. There was at least one “winning” message for 11 of the 13 AEDs studied. Topiramate was the most frequent “winner” (35% of all messages expressed economic superiority of topiramate over comparators). Lamotrigine was the most frequent “loser” (45% of all economic messages). There was at least one message showing economic superiority over lamotrigine for 7 of the 13 AEDs. For generically available AEDs, the explanation for cost savings stemmed from lower drug price, with no evidence of clinical inferiority. For levetiracetam, the explanation for cost-effectiveness stemmed from reduced seizure frequency, a better side effect profile, and improved adherence. The rationale for topiramate's economic advantages was unclear from conference abstracts. **CONCLUSIONS:** Several manufacturers of branded AEDs (Ortho-McNeil, UCB, Novartis) have produced studies describing their drug's economic value, while others have done very little work in this area. Patterns emerge in methods and comparators.

PNL14

COST-EFFECTIVENESS OF PREGABALIN AS ADJUNCT TO STANDARD THERAPY IN PATIENTS WITH REFRACTORY PARTIAL EPILEPSY

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OBJECTIVE: To assess the cost-effectiveness of pregabalin, a new add-on antiepileptic, as an adjunct to standard therapy (ST) in adult patients with refractory partial epilepsy (RPE). **METHODS:** We developed a stochastic model to estimate expected outcomes and costs over one year for a hypothetical cohort of 1000 RPE patients assumed to receive pregabalin (300mg/d, 600mg/d) plus ST or ST alone. Model outcomes included numbers of days free of seizures (“seizure-free [SF] days”) and quality-adjusted life-years (QALYs); the latter were assumed to depend on seizure frequency and side effects. Costs included those of antiepileptics only. Number of days with